

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Hidekazu Tanigawa et al.

Serial No.:

Filed:

For: GRAPHICAL-INTERACTIVE-SCREEN  
DISPLAY APPARATUS AND  
PERIPHERAL UNITS

Previous Examiner: V. Kostak

Previous Group Art Unit: 2611

October 30, 2001

Irvine, California 92614

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Prior to an examination on the merits of the above-identified application, please enter the following amendments:

**IN THE SPECIFICATION:**

Please add the following paragraph before the paragraph beginning on page 1, line 3:

**--Related Applications**

This is a divisional application of U.S. Serial No. 09/497,777, filed on February 3, 2000, which is a divisional application of U.S. Serial No. 08/829,357, filed on April 2, 1997, now issued

as U.S. Patent No. 6,118,442, which is a divisional application of U.S. Serial No. 08/326,758, filed on October 20, 1994, now issued as U.S. Patent No. 5,648,813.--.

**IN THE CLAIMS:**

Please cancel Claims 1-36 without prejudice.

Please add the following newly-drafted Claims 37-47.

1           37.   (New) A program receiver for displaying a graphical interactive picture by  
2 receiving a program transmitted from a program transmitter, said program receiver comprising:  
3           signal receipt means for receiving a signal transmitted from said program transmitter,  
4 said signal being a multiplex signal including a program and data specifying a structure of the  
5 graphical interactive picture;  
6           signal separation means for separating the signal received by said signal receipt means  
7 into a program signal and a graphical-interactive-picture-structure specification data signal;  
8           first graphical interactive picture generation means for generating the graphical  
9 interactive picture based on the graphical-interactive-picture-structure specification data signal  
10 from said signal separation means; and  
11           display means for displaying the graphical interactive picture generated by said first  
12 graphical interactive picture generation means.

1           38.   (New) The program receiver of Claim 37 further comprising:  
2           storage means for storing a plurality of basic picture elements in advance, said plurality  
3 of basic picture elements being figures composing the graphical interactive picture manipulated  
4 by a user and said basic picture elements being identified by identifiers; and

5 first graphical interactive picture generating means for generating the graphical  
6 interactive picture by combining the basic picture elements stored in said storage means.

1 39. (New) The program receiver of Claim 38 further comprising:

2 interactive manipulation means for inputting manipulation to the graphical interactive  
3 picture displayed by said display means;

4 basic action storage means for storing a content of an action for updating the graphical-  
5 interactive-picture-structure specification data; and

6 second graphical interactive picture generation means for retrieving the content of the  
7 action from said basic action storage means based on action information directing an update of  
8 the graphical interactive picture upon receipt of the input manipulation from said interactive  
9 manipulation means to update the graphical-interactive-picture-structure specification data to  
10 generate an updated graphical interactive picture.

11 40. (New) The program receiver of Claim 39, wherein said first graphical interactive  
12 picture generation means includes:

13 a receipt decode unit for receiving the graphical interactive-picture-structure specification  
14 data signal from said signal separation means to decode the same:

15 a storage unit for storing decoded graphical interactive-picture-structure specification  
16 data from said receipt decode unit, the graphical interactive-picture-structure specification data  
17 being composed of a panel object definition including a plurality of pieces of panel object  
18 information, an action definition including a plurality of pieces of action information, and a  
19 shape definition including a plurality of pieces of shape information;

10 a first process unit for retrieving the graphical interactive-picture-structure specification  
11 data from said storage unit, extracting the basic picture elements corresponding to the identifier  
12 by referring to the shape information from said storage unit in accordance with the retrieved  
13 graphical-interactive-picture-structure specification data, and for placing the extracted basic  
14 picture elements by referring to the panel object information; and

15 a first display control unit for controlling the display means to display the basic picture  
16 elements placed by said first process unit as the graphical interactive picture.

1 41. (New) The program receiver of Claim 40 wherein said interactive manipulation  
2 means includes:

3 an input manipulation acceptance unit for accepting a user's input manipulation to the  
4 graphical interactive picture; and

5 an interactive signal transmission unit for transmitting the input manipulation accepted by  
6 said manipulation acceptance unit to said second graphical interactive picture generation unit as  
7 an interactive signal, and

8 wherein said second graphical interactive picture generation means includes:

9 an interactive signal receipt unit for receiving the interactive signal from said interactive  
10 signal transmission unit;

11 an interactive signal interpretation unit for interpreting the interactive signal receipt unit;

12 a graphical-interactive-picture-structure specification data update unit for retrieving a  
13 content of an action from said basic action storage means in accordance with the interactive  
14 signal interpreted by said interactive signal interpretation unit to update the graphical-interactive-  
15 picture-structure specification data in said storage unit;

16 a second process unit for retrieving updated graphical-interactive-picture structure  
17 specification data from said storage unit and for extracting the basic picture elements  
18 corresponding to the identifier from said storage means to place the extracted display elements;  
19 and  
20 a second display control unit for controlling said display means to display the basic  
21 picture elements placed by said second process unit as an updated graphical interactive picture.

1 42. (New) The program receiver of Claim 41 further comprising information  
2 transmission means for transmitting the data of the graphical interactive picture updated by said  
3 interactive manipulation means to said program transmitter.

1 43. (New) The program receiver of Claim 40 further comprising information  
2 transmission means for transmitting the data of the graphical interactive picture updated by said  
3 interactive manipulation means to said program transmitter.

1 44. (New) The program receiver of Claim 40 further comprising information record  
2 means for outputting data related to the graphical interactive picture as per manipulation form  
3 said interactive manipulation means to make a record thereof.

1 45. (New) The program receiver of Claim 39 further comprising information record  
2 means for outputting data related to the graphical interactive picture as per manipulation form  
3 said interactive manipulation means to make a record thereof.

1 46. (New) The program receiver of Claim 40, wherein said graphical-interactive-  
2 picture-structure specification data further includes a class definition including a plurality of  
3 pieces of class attribute information.

1           47.   (New) The program receiver of Claim 37 further comprising:

2           interactive manipulation means for inputting manipulation to the graphical interactive  
3 picture displayed by said display means;

4           basic action storage means for storing a content of an action for updating the graphical-  
5 interactive-picture-structure specification data; and

6           second graphical interactive picture generation means for retrieving the content of the  
7 action from said basic action storage means based on action information directing an update of  
8 the graphical interactive picture upon receipt of the input manipulation from said interactive  
9 manipulation means to update the graphical-interactive-picture-structure specification data to  
10 generate an updated graphical interactive picture.

## REMARKS

This is a divisional application of U.S. Serial No. 09/497,777, filed on February 3, 2000.

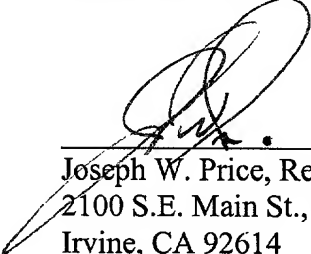
Newly drafted Claims 37-47 are within the scope of the original specification and do not add any new subject matter.

It is requested that the references cited in the prosecution of the parent application be considered in the prosecution of this divisional application, and accordingly copies of the references cited in the parent application are attached hereto with a form PTO 1449. The relevance of those references was set forth in the prosecution of U.S. Serial No. 09/497,777.

If the Examiner believes that a telephone interview will help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

Very truly yours,

PRICE AND GESS



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Joseph W. Price, Reg. 251,24  
2100 S.E. Main St., Ste. 250  
Irvine, CA 92614  
949/261-8433

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

A paragraph has been added before the paragraph beginning on page 1, line 3.

New Claims 37-47 have been added.

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